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CHECKLIST

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Checklist of the family Simuliidae (Diptera) of Finland

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Abstract

A checklist of the family Simuliidae (Diptera) is provided for Finland and recognizes 56 species. One new record has been added (*Simulium latipes*) and one name sunken in synonymy (*Simulium carpathicum*). Furthermore, *Simulium tsheburovae* is treated as a doubtful record.

Keywords

Checklist, Finland, Diptera, Simuliidae

Introduction

Simuliidae is a relatively small family of nematoceran flies, comprised of 2,163 species (2,151 living and 12 fossil) world-wide (Adler and Crosskey 2014). Numerous taxonomical confusions and different views on nomenclature between eastern and western scientists have created confusion in blackfly studies for many decades. Some taxonomical issues concerning species occurring in North Europe have been resolved by recent synonymisations (Raastad et al. 2010, Adler and Crosskey 2014). Systematics and nomenclature of the enumeration follow that of Adler and Crosskey (2014), and only the most relevant synonyms used in previous checklists for Finland are listed.

The faunistic level of knowledge in Finland is good, only few changes were made since compilation of the previous checklist (Ilmonen and Adler 2008). Few additional species can be expected to be found, and many taxonomical issues have been resolved within the last two decades.

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Number of species:
World: 2151 species (Adler and Crosskey 2014)
Europe: 230 species (Adler and Crosskey 2014)
Finland: 56 species
Faunistic knowledge level in Finland: good

Checklist

Nematocera Dumeril, 1805
infraorder Culicomorpha Hennig, 1948
superfamily Chironomoidea Newman, 1834

SIMULIIDAE Newman, 1834
SIMULIINAE Newman, 1834
tribe Prosimuliini Enderlein, 1921
HELODON Enderlein, 1921
Helodon ferrugineus (Wahlberg, 1844)
PROSIMULIUM Roubaud, 1906
Prosimulium hirtipes (Fries, 1824)
Prosimulium luganicum Rubtsov, 1956
Prosimulium macropyga (Lundström, 1911)
Prosimulium ursinum (Edwards, 1935)
tribe Simuliini Newman, 1834
CNEPHIA Enderlein, 1921
Cnephia eremites Shewell, 1952
Cnephia pallipes (Fries, 1824)
= *lapponica* (Enderlein, 1921)
GRENIERA Doby & David, 1959
Greniera ivanovae Ivashchenko, 1970
METACNEPHIA Crosskey, 1969
Metacnephia bilineata (Rubtsov, 1940)
= *saileri* (Stone, 1952)
Metacnephia lyra (Lundström, 1911)
= *tabescentifrons* (Enderlein, 1929)
= *trigoniformis* Yankovsky, 2003
Metacnephia tredecimata (Edwards, 1920)
SIMULIUM Latreille, 1802
sg. *Boophthora* Enderlein, 1921
Simulium erythrocephalum (De Geer, 1776)
sg. *Eusimulium* Roubaud, 1906
Simulium angustipes Edwards, 1915
= *securiforme* (Rubtsov, 1956)

Simulium aureum Fries, 1824
Simulium velutinum (Santos Abreu, 1922)
sg. *Boreosimulium* Rubzov & Yankovsky, 1982
Simulium annulus (Lundström, 1911)
Simulium baffinense Twinn, 1936
Simulium crassum (Rubtsov, 1956)
sg. *Hellichiella* Rivosecchi & Cardinali, 1975
Simulium dogieli (Rubtsov, 1956)
Simulium latipes (Meigen, 1804)
Simulium usovae (Golini, 1987)
sg. *Nevermannia* Enderlein, 1921
= ***Cnetha*** Enderlein, 1921
Simulium angustitarse (Lundström, 1911)
Simulium beltukovae (Rubtsov, 1956)
= *carpathicum* (Knoz, 1961)
Simulium bicorne Dorogostaisky, Rubtsov & Vlasenko, 1935
Simulium cryophilum (Rubtsov, 1959)
= *carthusiense* f. brevicaulis Dorier & Grenier, 1961
Simulium curvans (Rubtsov & Carlsson, 1965)
Simulium dendrofilum (Patrusheva, 1962)
Simulium fontinale Radzivilovskaya, 1948
Simulium juxtacrenobium Bass & Brockhouse, 1990
Simulium lundstromi (Enderlein, 1921)
Simulium silvestre (Rubtsov, 1956)
Simulium vernum Macquart, 1826
= *pritzkowi* (Enderlein, 1926)
sg. *Schoenbaueria* Enderlein, 1921
Simulium pusillum Fries, 1824
Simulium subpusillum Rubtsov, 1940
sg. *Simulium* Latreille, 1802
Simulium annulitarse Zetterstedt, 1838
Simulium argyreatum Meigen, 1838
Simulium frigidum Rubtsov, 1940
Simulium intermedium Roubaud, 1906
Simulium longipalpe Beltyukova, 1955
= *curvistylus* Rubtsov, 1957
Simulium monticola Friederichs, 1920
Simulium morsitans Edwards, 1915
Simulium murmanum Enderlein, 1935
= *forsi* (Carlsson, 1962)
Simulium noelleri Friederichs, 1920
Simulium ornatum Meigen, 1818
Simulium paramorsitans Rubtsov, 1956

Simulium posticatum Meigen, 1838
= *austeni* Edwards, 1915
= *verecundum* misid.
Simulium reptans (Linnaeus, 1758)
Simulium rostratum (Lundström, 1911)
= *sublacustre* Davies, 1966
Simulium rubtzovi Smart, 1945
Simulium transiens Rubtsov, 1940
Simulium truncatum (Lundström, 1911)
Simulium tuberosum (Lundström, 1911)
Simulium tumulosum Rubtsov, 1956
Simulium vulgare Dorogostaisky, Rubtsov & Vlasenko, 1935
sg. *Wilhelmia* Enderlein, 1921
Simulium equinum (Linnaeus, 1758)
= *zetlandense* (Davies, 1966)
STEGOPTERNA Enderlein, 1930
Stegopterna trigonium (Lundström, 1911)
= *richteri* (Enderlein, 1930)

Excluded species

Simulium fuscipes (Fries, 1824) see Notes
Simulium lineatum (Meigen, 1804) misidentified, most likely *S. equinum*
Simulium meigeni Rubzov & Carlsson, 1965 see Notes
= *pygmaeum* of some authors
Simulium tsheburovae (Rubtsov, 1956) see Notes

Notes

***Simulium fuscipes* (Fries, 1824)**. Adler and Crosskey (2014) treat fuscipes as a valid species of *S. ruficorne* species group in the subgenus *Nevermannia*, but no known records exist from Finland.

***Simulium meigeni* Rubzov & Carlsson, 1965**. Adler and Crosskey (2014) recognize the identity of *S. meigeni* within the subgenus *Hellichiella*, but there are no known records of this species in Finland. The name *pygmaeum* in Kuusela (1971) refers to the form of *pygmaeum* that is a synonym for *pusillum*, not *meigeni* (see Adler and Crosskey 2014).

***Simulium tsheburovae* (Rubtsov, 1956)**. No confirmed records of this species exist from Finland (Raastad et al. 2010), and the name probably subsumes one or more of the existing species within the subgenus *Hellichiella* (Adler and Crosskey 2014).

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